

Task: Respond to Depleted Uranium (DU)

Number: 031-503-1017-T

Effective Date:

Enlisted MOS:
COM Skill Level 1

STP: None

Conditions: You are in a combat situation where DU munitions or weapons systems that may contain DU are in use or may be used. You are given a protective mask, gloves, first aid supplies, Graphic Training Aid (GTA) 03-04-001A, and one of the following situations:

1. You encounter expended DU penetrators or parts of penetrators.
2. You encounter United States (US) or foreign armored vehicles that have breached crew compartments.
3. You encounter a fire where DU munitions may be involved.

Standards: Respond to DU, and implement protective measures as required.

Performance Steps

NOTE: NOTE: The presence of DU will not prevent accomplishment of the mission and will not be a concern when actively engaged in direct combat.

1. Identify the DU hazard.
 - a. Recognize expended or damaged DU penetrators or parts of penetrators.
 - (1) DU munitions are "discarding sabot" rounds that carry a DU penetrator in a full-caliber body. The M242 DU munitions are the M919. The fin and penetrator are indications of a DU munition.
 - (2) DU penetrators can be deformed if the penetrator hits a hard target. DU penetrators could maintain their original shapes or lose their nose cone and/or tail fin. Because a tungsten penetrator could appear very similar to a DU penetrator, assume all penetrators you find are made from DU.
 - b. Recognize a breached armored vehicle crew compartment.
 - (1) One visual indicator is a small, round entry and/or exit hole; however, other munitions may produce the same effects. Many vehicles on the battlefield (such as thin-skinned vehicles) look like Swiss cheese.
 - (2) Another indicator is the presence of penetrators in or around the vehicle. If a DU penetrator does not hit its target, you could see a "silver-white" penetrator for a time until the penetrator oxidizes. This is especially true in dry climates.
 - (3) Another indicator is the presence of DU oxides. DU oxides give the air a dull black color. Other colors (such as gold, yellow, or green) may be present, but DU oxide is usually black. DU oxides may appear as black dust, ash, charcoal-looking chunks, or large blackened fragments. The inside of the vehicle may have a layer of dust that covers everything. However, this is not always an indicator because plastics and other burned material give a similar appearance.
 - c. Recognize fires that involve DU munitions. DU is pyrophoric, which means that small particles may self-ignite when exposed to the friction and heat of a munitions strike. These particles tend to catch fire rapidly and burn at very high temperatures. This adds to the effect of DU

munitions strikes, since these burning particles often touch off secondary fuel and ammunition explosions on penetrated vehicles. One signature of a DU strike?especially at night?is the bright green flash, often compared to a 4th of July sparkler, created by the particles igniting.

NOTE: There are no additional protective measures required for intact DU munitions beyond those that are standard for all munitions.

- d. Identify the presence of DU contamination. The only way to positively identify the presence of DU contamination is with a Radiac meter?either the AN/PDR-77 (using the beta/gamma probe) or the AN/VDR-2 (with the beta shield open).

2. Protect yourself from contact with DU.

- a. Leave all penetrators alone, and notify the chain of command of the location of the penetrator.
- b. Put on a protective mask and cover your exposed skin (if required) to decontaminate the crew compartment of an armored vehicle that has been penetrated by armor-piercing munitions.
- c. Remain 50 meters or more from any armored vehicle or ammunition transport vehicle that is actively burning.

NOTE: Standard field hygiene (such as washing your hands and face) will help prevent the transfer and ingestion of DU. All munitions found on the battlefield should be considered potentially dangerous and left alone for removal by specially trained personnel.

3. Report known or suspected DU contamination to the chain of command.

4. Notify medical personnel when casualties have been determined or suspected to have been exposed to DU.

5. Administer first aid for DU injuries, and treat wounds until medical personnel are available.

Evaluation Preparation: Setup: Evaluate this task during a field exercise or during a normal training session. Establish a situation where contamination may occur either from the presence of spent DU penetrators on the ground, the breaching of the armored vehicle, or a fire where DU munitions are involved. If an armored vehicle is available, simulate a DU penetrator impact and damage by any means possible.

Brief soldier: Tell the soldier to identify the possible hazard and respond to the situation.

| Performance Measures | <u>GO</u> | <u>NO GO</u> |
|---|-----------|--------------|
| 1. Identified the DU hazard. | _____ | _____ |
| 2. Protected himself from contact with DU. | _____ | _____ |
| 3. Reported known or suspected DU contamination to the chain of command. | _____ | _____ |
| 4. Notified medical personnel when casualties have been determined or suspected to have been exposed to DU. | _____ | _____ |
| 5. Administered first aid for DU injuries, and treat wounds until medical personnel are available. | _____ | _____ |

Evaluation Guidance: Score the soldier GO if all steps are passed (P). Score the soldier NO-GO if any

step is failed (F). If the soldier fails any step, show him how to do it correctly.

References:

| Number | Required | Title |
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Certifications Required: None.

Supporting Individual Tasks: None.

Supported Drills: None.